

WHAT IS CLAIMED IS:

1. A system for expressing milk from a human breast, comprising: a control system adapted to be worn by a user; a massaging means adapted to be located posterior to the areola; an expression means adapted to be located in the vicinity of the areola; and containment means adapted to contain the expressed milk.

5 2. The system of Claim 1, wherein the massaging means and the expression means are operated independently by a control system.

3. The system of Claim 1, wherein the massaging means comprises a series of inflatable rings, and a plurality of bladders with an open section in the cone with adjustable fasteners such as Velcro sides to facilitate placement around the breast and to accommodate
10 different size breasts and breast conditions.

4. The system of Claim 3, wherein the bladders are pneumatically operated.

5. The system of Claim 4, wherein the bladders may be inflated and deflated by pneumatic operation.

6. The system of Claim 3, wherein the massaging bladders are generally
15 arranged in an annular manner.

7. The system of Claim 3, wherein the massaging bladders are generally arranged in a linear manner.

8. The system of Claim 2, wherein the expression means are pneumatically operated.

20 9. The system of Claim 8, wherein the expression means are pivotable about a secured point.

10. The system of Claim 9, wherein the expression means are generally in the shape of a bellows.

11. The system of Claim 10, wherein the expression means is adapted to apply forward pressure or movement against the breast.

12. The system of Claim 11, wherein the pressure is applied adjacent to the areola.

5 13. The system of Claim 8, wherein the expression means comprises a plurality of expandable and deflatable bellows.

15. The system of Claim 14, wherein the bellows provide biomimically of hand expression or infant sucking.

10 16. The system of Claim 1, wherein the containment means includes sterile or pre-sterile, detachable containers.

17. The system of Claim 1, wherein the containment means include pre-sterile disposable containers.

18. The system of Claim 1, wherein the system is automatically operated.

15 19. The system of Claim 1, wherein the system may be automatically operated at predetermined intervals.

20 20. The system of Claim 1, wherein the system includes components that are adjustable with several variables that may include intensity, duration and frequency and wherein expression and massage patterns may be saved to memory so that a specific massage, expression, and containment session may be repeated, stored, and retained for possible download for medical documentation.

21. The system of Claim 1, wherein the system is incorporated into a wearable garment.

22. The system of Claim 1, wherein the system is incorporated into a bra garment.

23. The system of Claim 1, wherein the system is battery operated and portable.

24. The system of Claim 23, wherein the battery is rechargeable.

25. The system of Claim 1, wherein the system includes a controller that is worn at the mother's waist and is the size of a small electronic device, such as a cell phone.

26. The system of Claim 25, wherein the controller controls the different components to simulate hand expression and an infant's suckling movements.

27. The system of Claim 26, wherein the controller includes software that provides commands to the controller.

28. The system of Claim 1, wherein the system is adapted to express milk from one breast at a time.

29. The system of Claim 1, wherein the system is adapted to express milk from both breasts at one time.

30. The system of Claim 1, wherein the system is adapted to express milk alternatively from each breast.

31. The system of Claim 1, wherein the system is operated either independently or in combination by means of components or sub-components that are operated pneumatically, mechanically or hydraulically.

32. The system of Claim 1, wherein the system includes a heating means to assist in eliciting a milk ejection reflex.

33. The system of Claim 1, wherein the system provides a containment means adapted to contain the expressed milk and further may be used for storage and for delivery of the stored breast milk to the infant.

34. A method of expressing milk, comprising the steps:
massaging a location posterior to the areola of the user; and

expressing breast milk by exerting pressure in the vicinity of the areola of
the user; and
containing the expressed breast milk.

35. The method of expressing milk of claim 34, wherein the massaging step
5 occurs prior to the expression step.